

FEDERAL TRANSIT ADMINISTRATION
PROJECT MANAGEMENT OVERSIGHT PROGRAM

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Grantee: City and County of Honolulu

Honolulu High-Capacity Transit Corridor
Project

Specialized Monitoring Deliverable - July 2007

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LIST OF ACRONYMS

AA	Alternatives Analysis
BAH	Booz Allen Hamilton
BFMP	Bus Fleet Management Plan
DB	Design/Build
DBB	Design/Bid/Build
DEIS	Draft Environmental Impact Statement
DOT	State of Hawaii Department of Transportation
DTS	City & County of Honolulu Dept. of Transportation Services
EIS	Environmental Impact Statement
FD	Final Design
FFGA	Full Funding Grant Agreement
FMP	Fleet Management Plan
FTA	Federal Transit Administration
GEC	General Engineering Consultant
GET	General Excise Tax
HCTCP	High-Capacity Transit Corridor Project
HRT	Heavy Rail Transit
IC	InfraConsult, LLC
ITS	Intelligent Transportation Systems
LONP	Letter of No Prejudice
LPA	Locally Preferred Alternative
LRT	Light Rail Transit
MOS	Minimum Operating Segment
NEPA	National Environmental Policy Act
NTP	Notice to Proceed
PB	PB Americas, Inc.
PBQD	Parsons Brinckerhoff Quade & Douglas, Inc.
PE	Preliminary Engineering
PMO	Project Management Oversight
PMOC	Project Management Oversight Contractor
PMP	Project Management Plan
PMSC	Project Management Support Consultant
QMP	Quality Management Plan
RFQ	Request for Qualifications
ROD	Record-of-Decision
SCC	Standard Cost Categories
SSCP	Safety and Security Certification Plan
SSMP	Safety and Security Management Plan
SSPP	Safety and Security Program Plan
SSOO	Sate Safety Oversight Office
TOD	Transit Oriented Development
UH	University of Hawai‘i

I. EXECUTIVE SUMMARY

The information provided in this report was obtained from the *conference call with the Federal Transit Administration (FTA) and the City and County of Honolulu (the City) on July 25, 2007 along with phone conversations and e-mail correspondence with the City staff during the month of July 2007.*

A. Technical Capacity and Capability

- Deliverables:
The City continues to work with the PMOC to develop the deliverables needed for technical capacity and capability. The City is currently working on the second draft of the Project Management Plan (PMP) and the Bus Fleet Management Plan (BFMP), as well as the first draft of the Safety and Security management Plan (SSMP). The City anticipates that the required deliverables for entry into Preliminary Engineering (PE) will be completed by mid-October 2007. The updated delivery dates are reflected in Appendix A.
- Staffing:
There was no additional staff introduced during *the month of July 2007*. The City advised that the General Engineering Consultant (GEC) selected to perform the PE services will add the staff necessary to assist in developing the FTA required deliverables. Again, the PMOC has some concern that the City, along with the GEC, may encounter difficulty acquiring the experienced staff needed for the long-term assignment given Hawaii's cost of living and proximity to the mainland.

B. Project Schedule and Project Delivery

The City and County of Honolulu (the City) continues to actively pursue an aggressive project schedule. The *current* schedule calls for receiving approval to enter Preliminary Engineering (PE) in October 2007, Record-of-Decision (ROD) by mid 2009, start of construction by December 2009 and Revenue Service for the initial phase of the "First Project" (Phase I) by December 2012.

The proposed "First Project" constitutes the minimum operating segment (MOS) and is a 20-mile route between East Kapolei and Ala Moana Center via Salt Lake Boulevard with 19 stations. Phase I is approximately 6 miles long and includes 6 stations. The proposed limits of Phase I are from the future site of the Kroc Center development at North-South Road to the vicinity of Waipahu.

The Project Management Oversight Contractor's (PMOC) assessment is that the overall project schedule continues to be exceedingly optimistic in response to the political mandate to have the Phase I in operation by December 2012. As a result, the City will need to balance their political agenda with efficient project delivery methods. The City is contemplating implementing the project using an incremental approach. It is the City's intent to begin construction of Phase I after the ROD is issued using a Design/Build method of delivery with local funds. The City continues to evaluate its options regarding project delivery.

A fully integrated schedule for delivering First Project still needs to be developed in order to evaluate the overall project schedule and any potential impacts the construction of Phase I may have on the remaining project. The City has been evaluating the schedule and delivery method, however, a ‘final’ schedule and delivery method will not be completed until the PE contractor is onboard.

C. Request for Qualifications (RFQ) for PE Services

The City issued a RFQ for the National Environmental Policy Act (NEPA)/Preliminary Engineering (PE) work on June 5, 2007. Statements of qualifications *were received* on July 5, 2007 and the City *tentatively selected PB Americas, Inc. (PB) for the PE Services General Engineering Consultant (GEC)*. *Negotiations with PB began on July 26, 2007, and the City anticipates executing a contract by August 15, 2007. The City intends to combine the activities needed to support NEPA into the GEC contract with separate Notices to Proceed (NTPs). The first NTP would be for technical support to the Draft Environmental Impact Statement (DEIS) process, including the development of project plans and procedures, evaluation of system alignment, station locations and technology, preparation of documentation needed for a competitive vehicle technology selection and procuring fixed guideway revenue vehicles, and conducting public involvement activities. The second NTP would cover the PE effort needed once the Federal Transit Administration (FTA) has approved entry into PE.*

From the City’s perspective, the GEC contract covers all of the required and necessary design functions, and with the Cost Plus Fixed Fee contract approach, it gives the City the ability to add additional scope and deliverables. FTA expressed concern that the scope of services did not expressly specify the requirement for the GEC to evaluate the economic impact the project schedule and delivery will have on the State’s labor, equipment and material supply. The City has advised that it is their intent to include this requirement in the negotiated scope of services.

D. New Starts Submittal

FTA indicated that the City does not have to complete the New Starts submittal because it is not yet in Preliminary Engineering. Nevertheless, the City has submitted most of the elements to support a rating, with the exception of the Financial Plan and Operating Plan, which are being reviewed and finalized by the City prior to transmittal to FTA.

E. Environmental Impact Statement (EIS)

The EIS was discussed with FTA during the conference call on July 25, 2007. A number of concepts were discussed including the limits of the alignment to be included in the EIS and the requirements for FTA approval. A summary of the discussions is provided in Part III of this report.

II. PROJECT DESCRIPTION

The Honolulu High-Capacity Transit Corridor Project (HCTCP) is a twenty-nine (29) mile elevated fixed guideway rail system along O`ahu's south shore between Kapolei and the University of Hawai'i (UH) at Mānoa, including a spur to Waikiki. The proposed "First Project" constitutes the minimum operating segment (MOS) and is a 20-mile route between East Kapolei and Ala Moana Center via Salt Lake Boulevard with 19 stations. Initial fleet size is anticipated to be 66 vehicles. There is currently no Full Funding Grant Agreement (FFGA) for this project.

The Honolulu High-Capacity Transit Corridor Project (HCTCP) serves to improve mobility in the corridor between Kapolei and the University of Hawai'i (UH) at Mānoa on the island of O`ahu. The City and County of Honolulu (City) Department of Transportation Services (DTS), in coordination with the Federal Transit Administration (FTA), has performed an Alternatives Analysis (AA) to evaluate alternatives in this corridor, which serves the largest percent of population and employment in O`ahu. Four alternatives were evaluated in the AA process:

- No-Build
- Transportation System Management
- Managed Lanes
- Fixed Guideway

The AA report states the Managed Lane alternative studied two operational options, while the Fixed Guideway alternative reviewed several alignment options.

Alternatives Analysis (AA) was initiated in August 2005 and the AA report was presented to the Honolulu City Council in October 2006. In November and December 2006, public meetings were held on the Alternatives Analysis, and on December 22, 2006, the City Council selected the Fixed Guideway as the Locally Preferred Alternative (LPA). In selecting the Fixed Guideway as the LPA, the City Council left some areas/alignment open, to be decided on as the project progresses: West Kapolei, Salt Lake Boulevard vs. Airport alignment, and the Waikiki/UH at Mānoa branches. The total LPA alignment is approximately 29-miles long.

The City Council also identified and selected a minimum operable segment, (hereinafter "the First Project"), which would be built first with the current funding/revenue available. This "First Project" is a 20-mile alignment from East Kapolei, through Salt Lake Boulevard and downtown, and with an eastern terminus at the Ala Moana (Shopping) Center. The "First Project" does not include the alignment from West Kapolei to East Kapolei, or from Ala Moana Center to Waikīkī or to the UH at Mānoa.

With regards to funding, the State enabled legislation for a 0.5% General Excise Tax (GET) Surcharge and the City Ordinance enacted the GET Surcharge in July and August 2005, respectively. The GET Surcharge will be a source of revenue to build the corridor project. The GET surcharge went into effect on January 1, 2007 and has a limited duration with an end date of December 22, 2022.

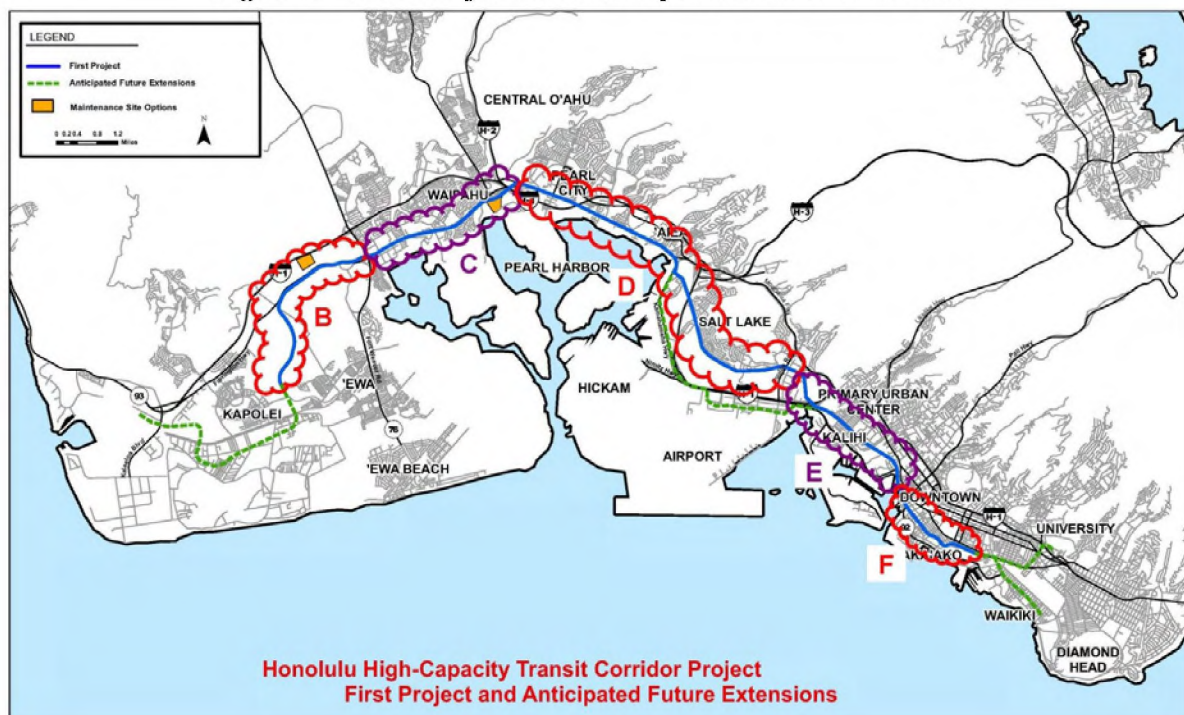
The assumptions made for the Fixed Guideway in the AA report were:

- System will operate from 4 a.m. to 12 a.m., with 3-10 minute headways.
- Maximum speed will be 65 mph, in a fully dedicated right-of-way with dedicated vehicles, mainly on aerial/elevated guideway with columns in existing roadway medians, although at-grade may be possible at some areas.
- Guideway is less than 30 feet wide between stations, and approximately 50 feet plus vertical circulation at stations.
- Stations will be spaced approximately at every mile, and are approximately 270 feet long.
- Cost to ride will be the same as “TheBus” with transfer available from one to the other.

At present the City is contemplating implementing the project using an incremental approach as shown in Figure 1 below. It is the City’s intent to perform the Final Design and begin construction of the initial phase of the “First Project” (Phase I) after the ROD is issued using a Design/Build method of delivery with local funds. Phase I is comprised of Segments B and C, and is approximately 6-miles long and includes 6 stations. The proposed limits of Phase I are from the future site of the Kroc Center development at North-South Road to the vicinity of Waipahu. Phase I is scheduled to be in operation at the end of 2012.

The remaining limits of the “First Project”, Segments D, E and F, are from Waipahu through Salt Lake Boulevard and downtown, with an eastern terminus at the Ala Moana (Shopping) Center. These segments (phases) of the “First Project” consist of approximately 14 additional miles, include 13 stations, and could be opened as construction is completed; the final section of the “First Project” is scheduled for operation until 2017, five years after Phase I is placed into service. The City is evaluating other options, such as Phase I operations on a demonstration basis during limited hours.

Figure 1. First Project and Anticipated Future Extensions



The current schedule is in the preliminary phase and provides most start and completion dates in quarterly increments. The fully integrated schedule should further define schedule activities and begin to identify critical path activities and associated milestone dates.

Project Management Oversight Contractor

In March 2007, FTA assigned Booz Allen Hamilton (BAH) to serve as the Project Management Oversight Contractor (PMOC). The Project Management Oversight “kick-off” meeting for Honolulu’s proposed High-Capacity Transit Corridor Project was convened on April 3, 2007, with representatives from the City and County of Honolulu, FTA and the PMOC, including Mayor Mufi Hannemann and members of his staff, representatives from Parsons Brinckerhoff Quade & Douglas (PBQD), the AA consultant, and from InfraConsult, LLC, (IC) the Project Management Support Consultant (PMSC) under contract with the City.

Key staff for this project are listed in the table below.

Name	Organization	Position/Title	Phone	Email
City and County of Honolulu				
Melvin Kaku	City – DTS	Director	808-768-8303	mkaku@honolulu.gov
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Faith Miyamoto	City – DTS	Environmental Planner	808-768-8350	fmiyamoto@honolulu.gov
FTA Region IX				
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Booz Allen Hamilton (PMOC)				
Frank McCarron	BAH	PMOC Program Manager	703-625-9274	mccarron_francis@bah.com
Justine Belizaire	BAH	PMOC Task Order Manager	786-586-0026	belizaire_justine@bah.com

III. CURRENT REVIEW

The information provided in this report was obtained from the conference call on July 25, 2007 with FTA and the City and County of Honolulu (City) staff who attended FTA's New Starts Roundtable in San Francisco, CA, as well as phone conversations and e-mail correspondence with City staff during the month of July 2007.

A. Technical Capacity and Capability

General Observations

- The overall list of documents required by the grantee to demonstrate technical capacity and capability *and the current status of these documents* is illustrated in **Appendix A – Grantee Deliverables for Technical Capacity and Capability**.
- *The City stated that they are currently working with the PMOC to develop the deliverables needed for the technical capacity and capability. The PMOC transmitted examples of a PMP, BFMP and an SSMP from projects being developed by other city grantees as a guide for the City. At present, the City is working on the second draft of the PMP, the second draft of the BFMP and the first draft of the SSMP. The City anticipates that the deliverables will be complete by mid-October 2007. No deliverables were received from the City during the month of July 2007*

PMOC Concerns

- As discussed in the project schedule and delivery section of this report, the overall schedule for delivery of this project is still in the development stage. The specific timeline for FTA approval to enter PE is not fixed, hence, the required dates for submittal, review and approval of documentation to support a technical capacity and capability determination are still in a state of flux.

Action Items

- The City is to take a look at the overall project schedule and when FTA's approval to enter PE is needed. The City will then put together a schedule for delivering the technical capacity and capability documentation, including appropriate duration for FTA and PMOC review. The PMOC will then review the schedule and come to an agreement with the City on the schedule and how to best achieve it.
- *The City anticipates that the required deliverables for entry into Preliminary Engineering (PE) will be completed by mid-October 2007.*

B. Project Schedule and Delivery

Overall, the City continues to evaluate the project schedule and delivery method. The City intends to have the GEC perform a schedule and delivery schedule review once they are onboard. **Appendix B** presents the project schedule dates for key milestones as presented in April 2007 and the latest June 2007 schedule, as well as actual dates for completed milestones.

General Observations

- The *GEC Contract* will combine activities needed to support NEPA and then moving into the PE with separate NTPs. The first NTP will provide technical support for the DEIS process and the second NTP will cover the PE effort needed once FTA has approved Entry into PE.
- On July 31, 2007, the PMOC received a copy of the ***Final Evaluation of Project Delivery Options – Honolulu high-Capacity Transit Corridor Project***, prepared by Parsons Brinkerhoff and Lea+Elliott for the City and County of Honolulu in November 2006. A review of the report explained the preliminary basis for the project delivery methods proposed by the City and currently being analyzed. The report recommended the following:
 - “Design-Build is the preferred project delivery option if an initial (short) phase is desired.”
 - “Design-Bid-Build scored highest for non-propriety technologies...”
 - “...Design-Build and Design-Build-Operate-Maintain, where all elements of a project phase are put out in a single package, did not merit further consideration due to bonding/insurance difficulties for a single contractor (team) for a project of this magnitude.”

Table 1 provides a summary of the project delivery findings as analyzed and recommended by the November 2006 report.

	DBB	DB	DBOM	Split DBOM DB	Split DBOM DBB
	1	2	3	4	5
Initial Screening Criteria					
Technologies	✓	✓	✓	✓	✓
Large Project / Phase	✓	✗	✗	✓	✓
Small Initial Phase	✗	✓	✓	✗	✗
Detailed Evaluation					
Non Proprietary Tech	✓	NA	NA	✗	✓
Proprietary Tech	NA	NA	NA	✓	✓

Key: ✓ = most appropriate ✗ = inappropriate
 ✓ = appropriate NA = not applicable

- At this time, Phase I (Segments B and C) of the “First Project” is planned to be Design/Build using local funds only. Construction is scheduled to begin after an ROD is issued. The City wants something visible to happen on the project within five (5) years,

including revenue operation by 2012. The City is still reviewing phases and methods of design and construction for follow-on phases.

- The limits of Phase I, Segment B (North-South Road to Fort Weaver Road) are not currently within the high-demand areas, although the UH West O'ahu campus is expected to be completed before 2012.
- The current schedule shows final phases of work to come on line by mid 2016, starting with Segment D, followed by Segment E in January 2017 and Segment F by mid 2017, which is five (5) years after the first phase is operational.

PMOC Concerns

- The PMOC expressed some concerns with regards to the current schedule. Overall, the schedule is optimistic, with a 'start of construction' by December 2009 and Phase I opening for revenue service by 2012.
- There are concerns regarding the process that will be used to communicate specific design elements being developed by the DB contractor for Phase I to the FD consultants working on the FD for the Segments D, E and F, and the timing and oversight of the process.
- There are general concerns that the schedule was developed by establishing milestones for the start of Phase I construction activities and completion of Phase I construction, and working backwards to establish dates for the EIS, PE and related activities. Concerns arise regarding the resultant durations for these activities.
- The City must receive guidance from FTA on the interrelationship between PE design activities to support the Final EIS and New Starts PE design activities conducted prior to FD authorization.

Action Items

- The City should continue to monitor/develop the project schedule and delivery method. It is recognized that the City will be unable to finalize the project schedule and delivery method until after the award of the PE contract.
- The City will explore delivery method options and contract packaging options for Segments D, E and F.
- The City will explore opportunities to eliminate gaps in the Vehicles and Systems procurement schedules.
- The City will specifically develop a communication process for communicating design information from the DB contractor for Phase I to the FD consultants for Segments D, E and F if this contracting approach is finally selected.

C. RFQ for PE Services

General Observations

- *The City issued an RFQ for the NEPA/PE work on June 5, 2007. Statements of qualifications were received on July 5, 2007 and as of July 25, 2007, PB had been tentatively selected as the General Engineering Consultant for PE Services. Negotiations with PB were scheduled to begin on July 26, 2007, and the City anticipates executing the contract by August 15, 2007.*

PMOC Concerns

- *PMOC has some concern that the City, along with the GEC, may encounter difficulty acquiring the experienced staff needed for the long-term assignment given Hawaii's cost of living and proximity to the mainland.*

D. New Starts Submittal

General Observations

- *FTA indicated that the City is not required to complete the New Starts submittal in September 2007 for inclusion in the FTA New Starts report to be issued in February 2008 because the project is not in PE. The City has submitted most of the requirements for the application to enter into PE. The land use templates are almost completed. The following items were discussed:*
 - *The methodology and approach for the Locally Preferred Alternative (LPA) has been provided to FTA.*
 - *Forecasting elements have been completed and provided.*
 - *The final reports on the user benefits are not complete at this time, however, the decline in transit usage has been addressed and transmitted.*
- *FTA advised that the City has submitted most of the elements to support a rating, with the exception of the Financial Plan and Operating Plan. The City advised that the Financial Plan is currently being reviewed prior to transmittal and the Operational Plan is being finalized. FTA advised the City that it takes approximately 3 to 4 months to receive approval into PE for FTA Region IX.*
- *The City advised that they are in the \$18 range for cost effectiveness for the HCTCP.*

E. Environmental Impact Statement (EIS)

General Observations

- *FTA concurred that the DEIS will present the range of impacts on the 29-mile LPA. It is the City's intent that the DEIS will address the Salt Lake alignment, the airport alignment, and a combination Salt Lake-airport alignment.*
- *FTA concurred that PE will be conducted on the 20-mile First Project and a lesser level of engineering will be conducted in support of NEPA on the other 9 miles that constitute the LPA.*

- *FTA requires the FEIS to be based on a selected technology.*
- *The EIS will disclose the impacts of the First Project's termini and construction of the initial section (Phase I).*
- *FTA believes that the New Starts ratings will not be adversely affected if the City funds attributable to Phase I are excluded from the local matching share calculation.*
- *FTA indicated the ROD could be issued on the 20-mile First Project or the 14-mile Federally-funded section. At the City's request, FTA will provide guidance to the City on when NEPA will be considered complete for Phase I if a ROD is issued on the 14-mile section.*

APPENDIX A – GRANTEE DELIVERABLES FOR TECHNICAL CAPACITY AND CAPABILITY

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR Technical Capacity and Capability To Enter PE – Grantee Checklist							
Activity / Deliverable		Delivery Dates					
		April 2007 Submittal Date	Planned Submittal Date	Actual Submittal Date	FTA Review Comments Due	Revised Submittal Date	FTA Accepted
		mm/dd/yy	mm/dd/yy	mm/dd/yy	mm/dd/yy	mm/dd/yy	mm/dd/yy
1	Project Management Plan (PMP)	06/01/07	06/01/07	06/12/07*			
2	Bus Fleet Management Plan (BFMP)	06/01/07	06/01/07	06/12/07*			
3	Quality Management Plan (QMP)	06/18/07	TBD				
4	Real Estate Acquisition Management Plan (RAMP)	06/01/07 (part of PMP)	06/01/07 (part of PMP)				
5	Third-Party Agreement Plans	06/01/07 (part of PMP)	06/01/07 (part of PMP)				
6	Safety and Security Management Plan (SSMP)	TBD	TBD				
7	Safety and Security Certification Plan (SSCP)	TBD	TBD				
8	Risk Assessment (<i>To Be Determined</i>)	TBD	TBD				
9	Financial Plan		TBD				
10	Request to Enter Preliminary Engineering (PE)	07/01/2007	TBD				
11	Establish a State Safety Oversight Office (SSOO)		TBD				
12	Safety and Security Program Plan (SSPP)	TBD	TBD				

Revised 06/13/2007

NOTES:

** Initial submittals provided by the City on 06/12/07. Comments provided by PMOC during meeting on 06/13/07. Resubmittal pending.*

APPENDIX B – OVERALL PROJECT SCHEDULE

HONOLULU HIGH-CAPACITY TRANSIT CORRIDOR Project Schedule Analysis			
Activity Description	SCHEDULE DATES		
	April 2007 Schedule	June 2007 Schedule	Actual
RFQ – Advertise	06/01/2007	06/05/2007	06/05/2007
RFQ – Contract Award (NTP#1)	08/01/2007	08/15/2007	
Start Vehicle Procurement	4 th Qtr 2008	08/15/2007	
Start Preliminary Engineering (NTP #2)	Mid 2007	10/2007	
Select Vehicle Technology	Mid 2007	Mid 2008	
Record of Decision (ROD)	Mid 2009	Mid 2009	
Start Utility Relocation		Mid 2009	
Start Right-of-Way Relocation and Acquisition	4 th Qtr 2007	Mid 2009	
Start Phase I Design	4 th Qtr 2009	3 rd Qtr 2009	
Start Phase I Construction	4 th Qtr 2009	1 st Qtr 2010	
FD Authorization	1 st Qtr 2009	3 rd Qtr 2010	
Start Remaining Design	N/A	3 rd Qtr 2010	
FFGA		3 rd Qtr 2011	
Start Remaining Construction	N/A	3 rd Qtr 2012	
Complete Phase I Construction	Mid 2012	Mid 2013	

